

Health & Safety Manual

Supplement 2.22

Technical Safety Requirements

Approved by the ES&H Working Group

_____ date _____

Robert W. Kuckuck
Deputy Director of Operations

Technical Safety Requirements*

Contents

Terms and Definitions..... ii

1.0 Introduction.....1

2.0 Applicability.....1

3.0 Requirements/Regulatory Summary1

4.0 Process for Compliance.....1

5.0 Responsibilities2

6.0 LLNL Contacts2

7.0 Supporting References and Standards2

Terms and Definitions

Operational Safety Requirements (OSRs)

These are the operating and safety requirements for nuclear facilities.
The term OSR has been replaced by Technical Safety Requirement (TSR).

Technical Safety Requirements (TSRs)

Those requirements that define the conditions, safe boundaries, and management or administrative controls necessary to ensure the safe operation of a nuclear facility and to reduce the potential risk to the public and facility workers from uncontrolled releases of radioactive materials or from radiation exposures due to inadvertent criticality. A TSR consists of safety limits, operating limits, surveillance requirements, administrative controls, use and application instructions, and the basis thereof. TSRs were formerly known as Operational Safety Requirements for nonreactor nuclear facilities.

Technical Safety Requirements

1.0 Introduction

DOE Order 5480.22, “Technical Safety Requirements” requires that Technical Safety Requirements (TSRs) be prepared for nuclear facilities based upon the Safety Analysis Report prepared in accordance with DOE Order 5480.23. DOE Order 5480.22 delineates the criteria, content, scope, format, approval process, and reporting requirements for the TSR document and its revision.

Specific LLNL implementing guidance on this subject has not yet been written; therefore, the provisions of DOE Order 5480.22 will apply.

The process for promulgating new DOE rules, orders, and standards for nuclear facilities as well as the terms and conditions in the contract between the DOE and the University of California are in a state of change. Thus, this supplement will be updated as the requirement source documents change.

2.0 Applicability

The requirements in DOE Order 5480.22 apply to LLNL facilities categorized as nuclear facilities.

3.0 Requirements/Regulatory Summary

DOE Order 5480.22 and its Attachment 1, “Guidelines for Technical Safety Requirements,” contain requirements for preparing, submitting for approval, maintaining, and updating TSRs. It also contains guidance for operating facilities in accordance with the TSRs.

4.0 Process for Compliance

Applicable facilities shall comply with DOE Order 5480.22.

5.0 Responsibilities

Facility Associate Directors (ADs) are responsible for implementing the requirements of DOE Order 5480.22.

A draft TSR document shall be prepared for all facilities covered by this DOE Order. Before approving the document, the Facility AD shall assure that an independent review of the TSRs has been performed. The LLNL-approved TSR document will then be forwarded to the DOE Oakland Operations (OAK) Program Manager for approval. DOE's approval of the TSR document shall be obtained prior to operation of a new facility.

Annual updates to TSRs will be approved by the Facility AD after an independent review.

Each LLNL nuclear facility with a DOE approved TSR must be in compliance with all of its TSRs.

6.0 LLNL Contacts

For additional information, contact the following as necessary:

- Directorate Assurance Manager.
- ES&H Team Leader.

7.0 Supporting References and Standards

DOE Order 5480.22, "Technical Safety Requirements"; and Attachment 1, "Guidelines for Technical Safety Requirements."